April 4, 1965

CHEMICAL WORLD INDEX KEY

3103 RIVER ROAD.

READING, PA., USA

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Dear Dr. Lederberg:

You may be as delighted as I was to learn that the male Grand Champion in our Berks County Science Fair (which I helped judge last week) chose your prize-winning work as his starting point. The opening remark in his workbook was this: "Since the discovery of (bacterial) conjugation by Lederberg and Tatum in 1947, much work has been done in order to prove that sexual reproduction is characteristic of even one of the most primitive forms of life-- bacteria. Lederberg used mutants of a certain strain of ESCHERINIA coli (K-12)..."

Some time during the past ten years you had a handsomely illustrated story on all this in the SCIENTIFIC AMERICAN. If you have any reprints of that or other related work, I'm sure that he would be inspired to continue following your leads. His exhibit showed significant differences in the IR Spectra of DNA fractions from sexually differentiated bacteria. Ronald Polinsky is his name (picture enclosed).

Your mailing of last week also stimulated some additional churning of my own gray matter, as reflected in the other enclosures. Some 15 years ago I wrote the "EMPTY COLUMN" parable to gently remind readers that my ideas would be misunderstood. I had no idea that they would continue being misunderstood for this long a time-but then, unlike the mythical Arabian, my manuscript did have a number of errors of the sort that plagues pioneers. Today I would greatly elaborate on the step-by-step expansion of a polycyclic locant path. For example, the "ae af -bg -ch -dh" and (534 b4 c3\*) descriptions would be elaborated somewhat as follows:

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-dh	5- (last) <i>-</i> 5	<u>c3</u>			/	1
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Your "morphinan" example was cited by Berger & Wilson at Redstone Arsenal as a rare example that "necessitated revisions to canonical ordering techniques such as those used by DuPont and Chemical Abstracts Service." Their figure did not reflect direct aqquaintance with your papers, but I will ask when I see them again.

My path-tracing locants are not yet recognized as effort-saving descriptors. It's as though trigonometry is not a desirable way to measure things because the trig-values are tedious to calculate. I keep hoping that computer centers like yours will some day soon crank out these tables of synonyms for amateur notationers. Well-- I'll post you again after our notationers air their heavy labors this week at the ACS Meeting in Detroit (our semi-annual meeting time is at these ACS meetings).

Sincerely yours, Windows

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